

Work Order ID 146231

Friday, May 13, 2016 9:01:38 AM

146231

Page 1

Item ID: D5317-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Dowel Pin

Start Date: 5/31/2016 Start Qty: 50.00

50

Cust Item ID:

Required Date: 5/31/2016 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan: MCSDate: MAY 13 2016

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D5317	A

100

0.00

100

Purchasing

Memo

0.00

Purchasing

Issue P/O: 32396

Possible supplier: MCMaster Carr

Supplier P/N: 97395A451

C OF C is required.

50MAY 17 2016DAS
13
9-30

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

50^F 5/16-05-18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Work Order ID 146231

Friday, May 13, 2016 9:01:38 AM

146231

Page 2

Item ID: D5317-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Dowel Pin

Stop ***NS2***

Start Date: 5/31/2016 Start Qty: 50.00

50

Cust Item ID:

Required Date: 5/31/2016 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

MAY 19 2016

130

Identify as per dwg & Stock Location: *ST/62*

0.00

130

Packaging

Memo

0.00

Packaging

MAY 19 2016

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

16/5/24 *[Signature]*
2m 16/05/20

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval				
Description Work Order Deviation				Disposition				Completed By			
								Lead hand / Supervisor Approval Verification			
								QC / QA Coordinator Approval			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : _____											

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Page 1

146231

D5317-1

Required Date: 5/31/2016

Required Qty: 50.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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0,0000

97395A451

Dowel Pin

**

50

50 20 sp 16-05-18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
				OTHER : ☐			

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval				
Description Work Order Deviation				Disposition				Completed By			
								Lead hand / Supervisor Approval Verification			
								QC / QA Coordinator Approval			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : ☐											



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO32396**

Purchase Order Date 5/17/2016

PO Print Date 5/17/2016

Page Number 8 of 9

Order From :

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

330 995 5500

Ship To Contact

Ship To Phone

Ship Via:

Purolator ground ppd

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 10

USD

FCA - (Free Carrier)

Line Total:

\$14.72

23 97395A451

Dowel Pin

5/19/2016 FN

Yes

5/19/2016

50.00

Each

\$0.81

\$40.60

AS PER DWG DD5317 REV. A
B146231

8/16-05/18

Line Total:

\$40.60

24 30345T24

LANYARDS

5/19/2016

Yes

5/19/2016

10.00

Each

\$2.64

\$26.40

Line Total:

\$26.40

Note:

5/17/2016

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO32396

Order Placed By
Chantal Lavoie

McMaster-Carr Number
3429436-04

Page 1 of 2

05/17/2016

Line	Product	Ordered	Shipped
1	8705A64 DeWalt DWE4214 Electric Angle, Grinder for Grinding Wheels and Sanding Discs	1 Each	1
2	4125A186 Band Saw Blade for Straight Cuts, 1/2" WD X 0.025" Thickness, 140" LG, 14 Teeth Per Inch	6 Each	6
3	7965K38 Multipurpose Sleeve Bearing with Groove, for 1" Shaft Diameter, 1-3/8" OD, 1" LG.	2 Each	2
4	5906K412 Oil-Embedded Thrust Bearing, for 1" Shaft Diameter, 1-1/2" OD, 1/16" Thickness.	2 Each	2
5	8946A39 Tapered Carbide End Mill, 3 Flute, 1 Degree Taper, 1/4" Tip Diameter, 2" L of Cut	2 Each	1
6	4708K55 Bronze Check Valve, High Flow, 1 NPT Female, Class 125	1 Each	1
7	4708K58 Bronze Check Valve, High Flow, 2 NPT Female, Class 125	1 Each	1
8	44605K278 Low-Pressure Black Malleable Iron Thread Fitting, 1 X 1/2 Pipe Size, Reducing Coupling	1 Each	1
9	5259T5 Load-Center Circuit Breaker, Siemens Qp Series, Double Pole, 120/240 VAC, 30 Amps	1 Each	1
10	44615K424 Standard-Wall Black Steel Threaded Pipe Nipple, 1/2 Pipe Size X 1-1/2" Length	1 Each	1
11	47865K25 Brass Ball Valve, 1" NPT Female Connections	1 Each	1
12	44615K436 Standard-Wall Black Steel Threaded Pipe Nipple, 1 Pipe Size X 2" Length	3 Each	3
14	44615K546 Standard-Wall Black Steel Threaded Pipe Nipple, 1 Pipe Size X 12" Length	1 Each	1
15	4457K116 Standard Wall Black Welded Steel Pipe, 1 Pipe Size X 18" Length, Threaded Ends	1 Each	1
16	44605K116 Low-Pressure Black Malleable Iron Thread Fitting, 1 Pipe Size, 90 Degree Elbow	3 Each	3
17	44605K196 Low-Pressure Black Malleable Iron Thread Fitting, 1 Pipe Size, Union	1 Each	1
18	44615K319 Standard-Wall Black Steel Threaded Pipe Nipple, 2 Pipe Size X 9" Length	1 Each	1
21	44615K417 Standard-Wall Black Steel Threaded Pipe Nipple, 1-1/4 Pipe Size X 1-5/8" Length, Fully Threaded	1 Each	1
22	93695K58 Oil-Rst Fire-Retardant Blended Buna-N Foam, 50 ft. Adhesive-Back Strip, 1/4" Thickness, 1" WD	1 Each	1

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO32396

Order Placed By
Chantal Lavoie

McMaster-Carr Number
3429436-04

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05/17/2016

Line	Product	Ordered	Shipped
23	97395A451 Corrosion Resistant Dowel Pin, Type 316 Stainless Steel, 1/8" Diameter, 3/4" Length, Packs of 10	5 Packs	5
24	30345T552 18-8 Stainless Steel Wire Rope Lanyard - Not for Lifting, Loop-to-Tab, 3/64" Rope Diameter, 12" LG, Nylon	10 Each	10

Sp/6 05-18

Shipped separately from our Chicago warehouse on 05/17

5	8946A39 Tapered Carbide End Mill, 3 Flute, 1 Degree Taper, 1/4" Tip Diameter, 2" L of Cut	2 Each	1
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